



***SDL1072A Series***  
***AC Resistive Loads***  
***Operation Manual***

***TDI-Dynaload<sup>®</sup> Division***

Document Number 403825 — Revision A

---

SDL1072A

© 2006 TDI-Dynaload — All Rights Reserved.

The copyright laws of the United States and other countries protect this material. It may not be reproduced, distributed, or altered in any fashion without the expressed written consent of TDI-Transistor Devices, Inc.

### **Disclaimer**

The contents of this document, including all specifications, are subject to change without notice.

### **Mandatory**

### **Customer**

### **Information**

### **Federal Communications Commission (FCC) Statement**

**NOTE:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy; and, if not installed and used in accordance with the instruction manual, may cause interference to radio communications. Operation of this equipment in a residential area may cause harmful interference in which case the user will be required to correct the interference at their expense.

### **Trademarks**

**Dynaload** is a registered trademark of Transistor Devices, Inc.

### **Ordering Information**

The ordering number for this document is 403825 Rev A. To order this or any other document, contact:

TDI-Dynaload Division  
Transistor Devices, Inc.  
36A Newburgh Rd.  
Hackettstown, NJ. 07840  
Phone (908) 850-5088  
Fax (908) 850-0679

### **Online Availability**

To find out more about TDI and our products, visit us on the web at: <http://www.tdipower.com/> or visit TDI-Dynaload directly at: <http://www.tdipower.com/dynaload/>.

### **Customer Services**

For technical assistance regarding our products, contact the following:

### **Sales Inquires**

Rick Parizot: [pariz\\_r@tdipower.com](mailto:pariz_r@tdipower.com)  
Phone (908) 850-5088 X 207  
Fax (908) 850-0679

### **Customer Service and Repairs**

Phone (908) 850-5088 X 486  
Fax (908) 850-0679

## ***SDL1072A Technical Description: Custom Resistive AC Load***

### **Overview**

The load assembly consists of 2 isolated channels using 1 KW resistors.

Each channel provides either 2 KW of load at 208 VAC input or can be connected as 2 -1 KW inputs with a common return, for 120 VAC inputs.

### **Inputs**

The load inputs are standard terminal blocks, located on the rear of the cabinet. Also on the rear is a selector switch for choosing either 208 or 120 VAC operation. This switch will allow the user to change the operating voltage without having to open the cabinet.

### **Elements**

The actual load elements are two 15 ohm resistors wired with multiple tap locations to provide a resistive load of 14.4 ohms at 120VAC (8.33 Amps, 1000 Watts) with respect to the return. Or when wired for 208VAC, will provide 21.6 ohms (9.62 Amps, 2000 Watts).

### **Channels**

Each load channel has an internal 24 VDC power supply to operate the fan and selector relays. The input to this supply will be derived from the actual load inputs. The exact ohmic value of the load resistors will be adjusted to make the additional power draw transparent to the load channel.

### **Protection**

Over current protection is through the use of a double pole circuit breaker, located on the front panel.

### **Remote operation**

Remote control of front panel "Load On" functions is provided for with a connection on the rear panel.

Table of Contents

SDL1072A Technical Description: Custom Resistive AC Load..... 3

    Overview..... 3

    Inputs..... 3

    Elements..... 3

    Channels..... 3

    Protection..... 3

    Remote operation..... 3

SDL1072A Switch Functions ..... 5

    120 VAC Configuration..... 6

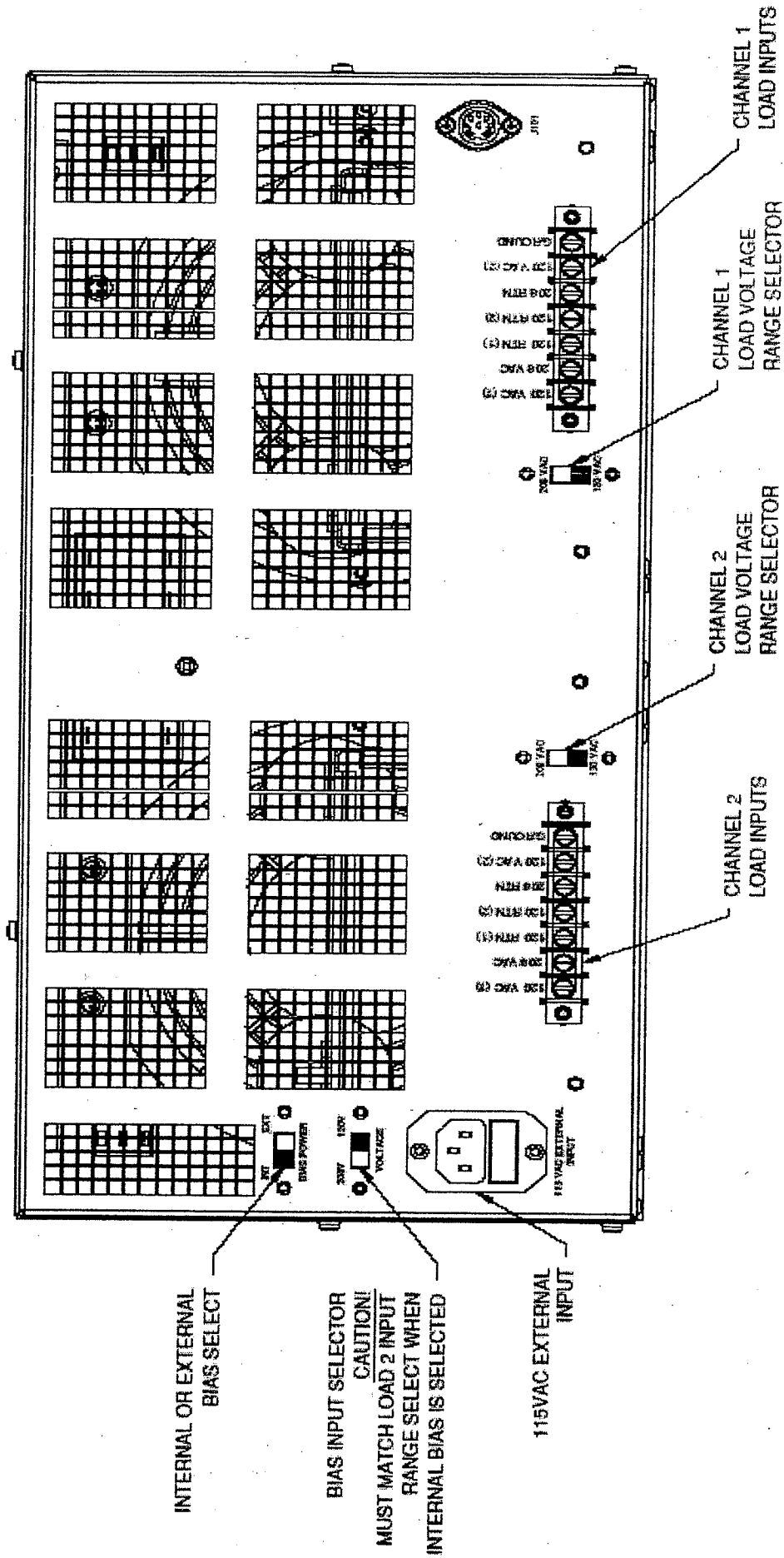
    115 VAC Configuration..... 7

    208 VAC Configuration..... 8

# SDL1072A Switch Functions

## SDL 1072A

### SWITCH FUNCTIONS/DESCRIPTIONS



INTERNAL OR EXTERNAL BIAS SELECT

BIAS INPUT SELECTOR  
CAUTION!  
MUST MATCH LOAD 2 INPUT RANGE SELECT WHEN INTERNAL BIAS IS SELECTED

115VAC EXTERNAL INPUT

CHANNEL 2 LOAD VOLTAGE RANGE SELECTOR

CHANNEL 1 LOAD VOLTAGE RANGE SELECTOR

CHANNEL 2 LOAD INPUTS

CHANNEL 1 LOAD INPUTS

REAR VIEW

SDL10724

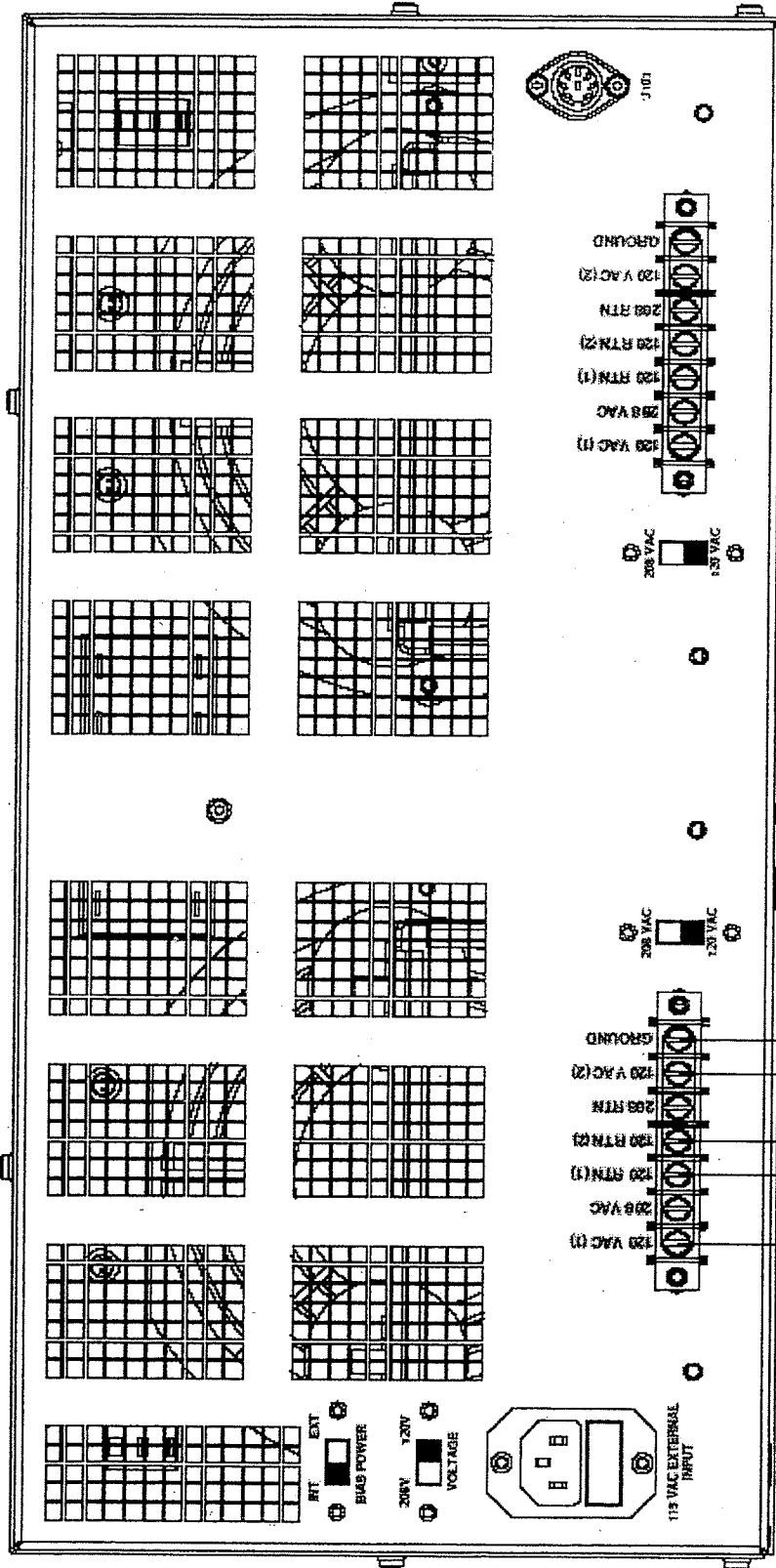
# 120 VAC Configuration

SDL 1072A

## CONFIGURATION FOR: 120VAC INTERNAL BIAS MODE

CHANNEL 2

CHANNEL 1



CHANNEL 1  
CAN BE CONFIGURED  
AS EITHER 120VAC OR 208VAC INPUT

MUST USE CHANNEL 2-1 FIRST  
FOR INTERNAL BIAS OPERATIONS

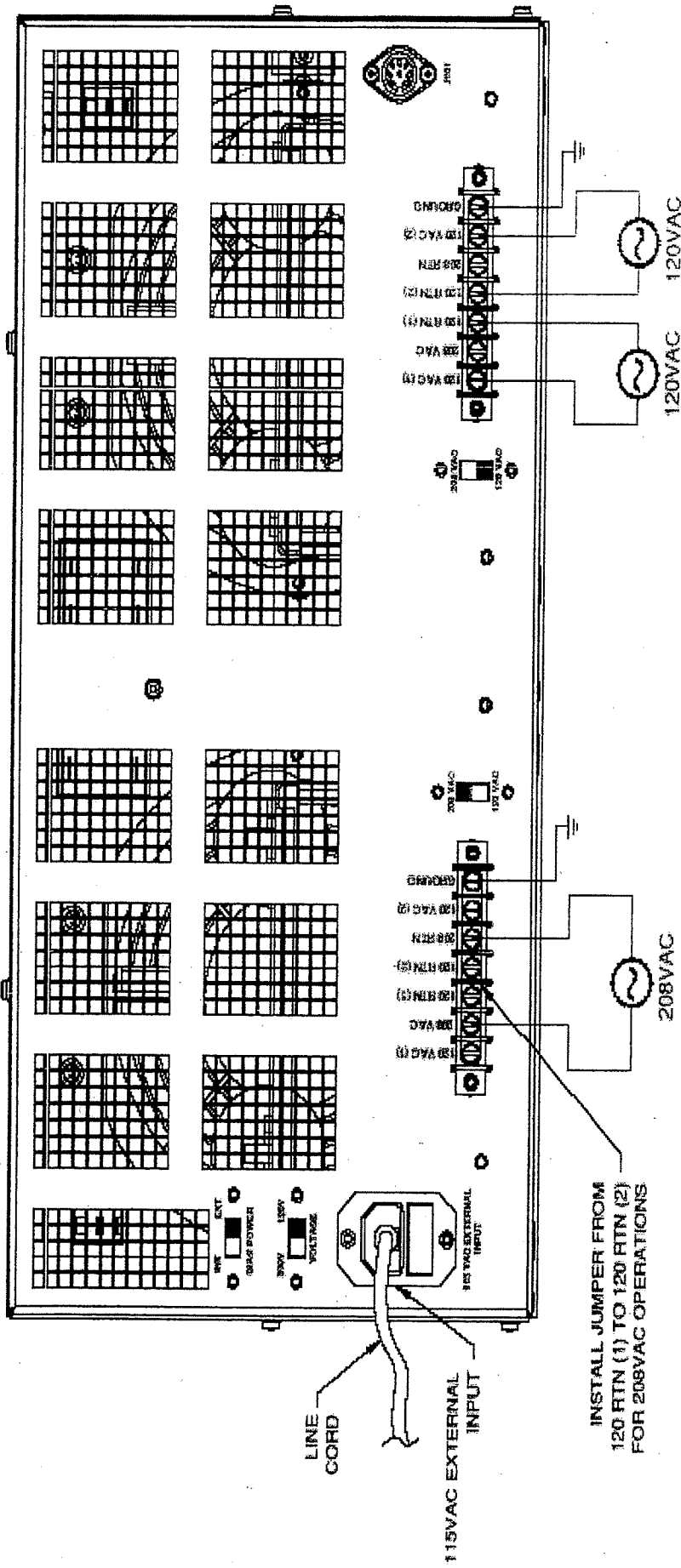
SDL1072A

115 VAC Configuration

SDL 1072A  
CONFIGURATION FOR:  
115VAC EXTERNAL BIAS MODE

CHANNEL 2

CHANNEL 1



INSTALL JUMPER FROM  
120 RTN (1) TO 120 RTN (2)  
FOR 208VAC OPERATIONS

JUMPER 120 RTN (1) TO 120 RTN (2)

CHANNEL 1 AND CHANNEL 2  
CAN BE CONFIGURED  
AS EITHER 120VAC OR 208VAC INPUTS

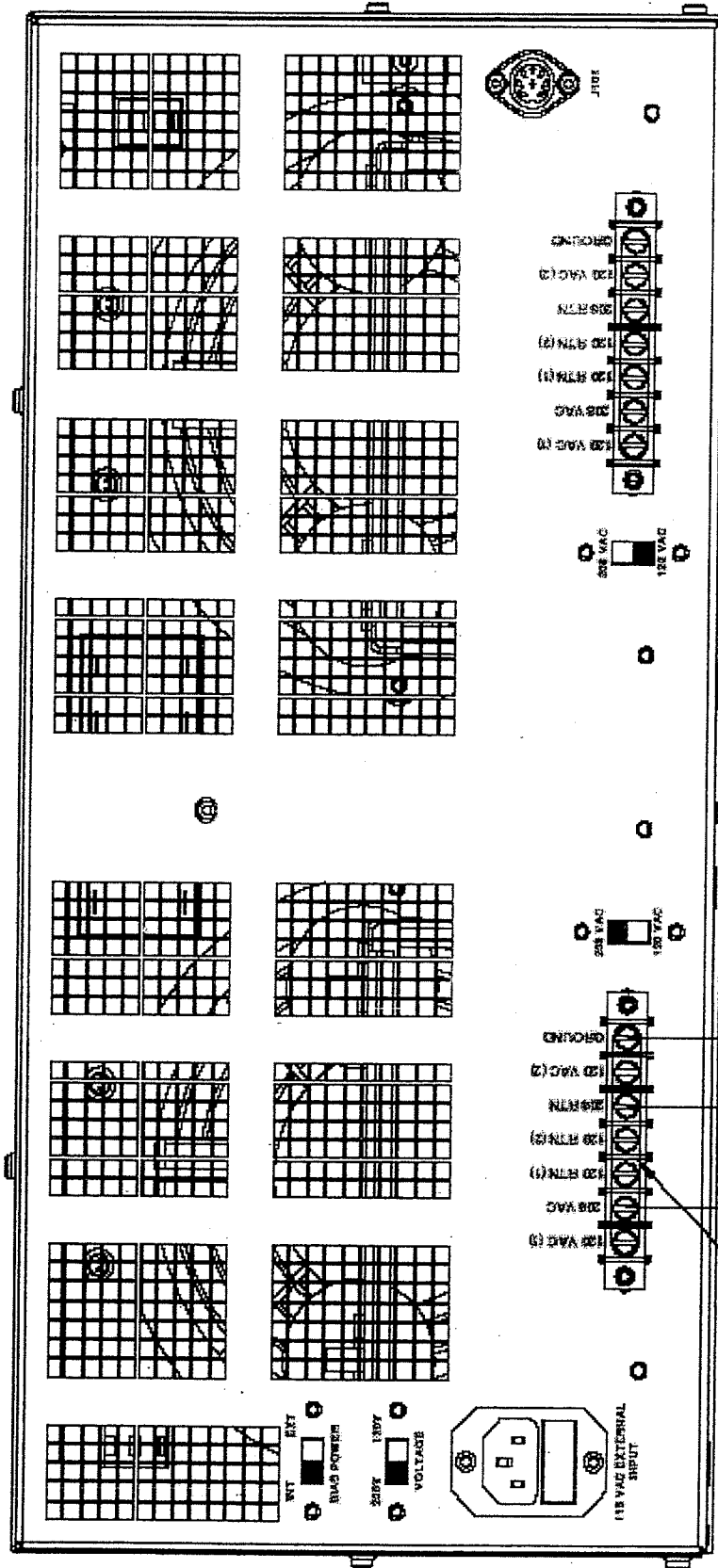
SHOWN CHANNEL 1 AS 120VAC AND CHANNEL 2 AS 208VAC

# SDL1072A CONFIGURATION FOR: 208VAC INTERNAL BIAS MODE

208 VAC Configuration

CHANNEL 2

CHANNEL 1



CHANNEL 1  
CAN BE CONFIGURED  
AS EITHER 120VAC OR 208VAC INPUT

INSTALL JUMPER FROM  
120 RTN (1) TO 120 RTN (2)  
FOR 208VAC OPERATIONS

MUST USE CHANNEL 2 FIRST  
JUMPER 120 RTN (1) TO 120 RTN (2)